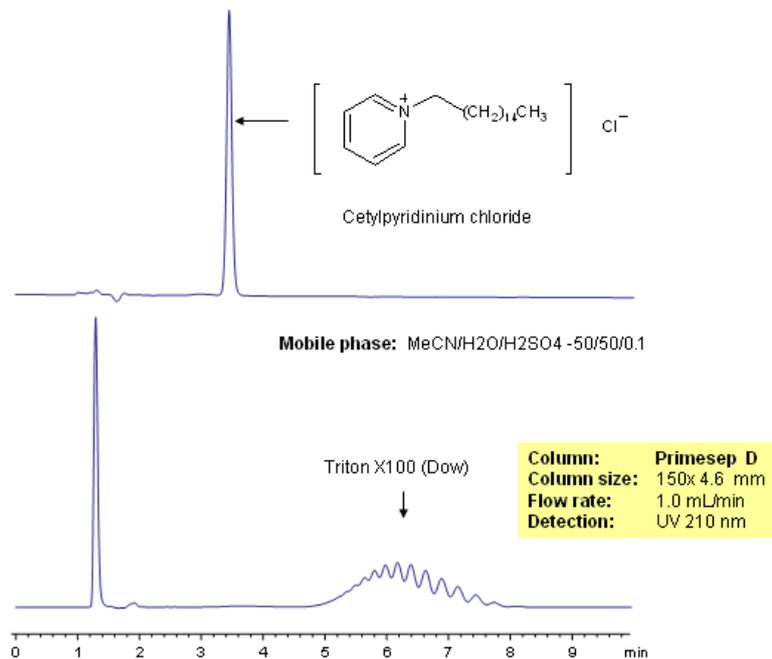


HPLC Separation of Surfactants



Surfactants are molecules that contain both hydrophilic and hydrophobic groups, usually in the form of a hydrophilic head and a hydrophobic tail. Surfactants are used in detergents where they can form micelles around hydrophobic dirt molecules and wash them away. Triton X-100 is a surfactant with a hydrophilic polyethylene oxide chain that can be separated on a Primesep D reverse-phase HPLC column based on the number of oxide units in the chain. The mobile phase is water, acetonitrile (MeCN, ACN) and sulfuric acid as buffer. UV detection at 210 nm.

Method Parameters

Column	Primesep D, 4.6x50 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H ₂ O – 50/50%
Buffer	H ₂ SO ₄ - 0.1%
Flow Rate	1.0 mL/min
Detection	UV 210 nm

Quelle: <https://sielc.com/Application-HPLC-Separation-of-Surfactants>